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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/628,596 | 07/28/2003 | Josef Ditt | 496P017 | 4640 |
| 42754 | 7590 | 08/23/2005 | EXAMINER | |
| NIELDS & LEMACK 176 EAST MAIN STREET, SUITE 7 WESTBORO, MA 01581 | | | ODOM, CURTIS B | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2634 | |

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/628,596 | Applicant(s) DIRR, JOSEF | |
| | Examiner Curtis B. Odom | Art Unit 2634 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 7 is/are rejected.
- 7) ☐ Claim(s) 5 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/21/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because of the following minor informalities:
 - a. The word “Summary” is suggested to be changed to “Abstract”.
 - b. The sentence “A corresponding analog coding has already been disclosed in Canadian Patent No. 1, 241, 277 and corresponding digital codings have been disclosed in the patent USP 6, 072, 829” is suggested to be deleted.
 - c. “Figure 16” is suggested to be deleted.Correction is required. See MPEP § 608.01(b).

Claim Objections

2. Claims 1-8 are objected to because of the following informalities:
 - a. All references to the drawings are suggested to be deleted.
 - b. In claim 1, the phrase “the same synchronous alternating current” is suggested to be changed to “a same synchronous alternating current”.
 - c. In claim 1, the phrase “the PAM samples” is suggested to be changed to “pulse amplitude modulated (PAM) samples”.
 - d. In claim 1, the phrase “and the code elements of the analog code (Translator’s Note: The German text is ungrammatical) in that...” is suggested to be deleted.

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e. In claim 2, the phrase “the code words” is suggested to be changed to “code words”.

f. In claims 3 and 4, the phrase “the PAM samples” is suggested to be changed to “pulse amplitude modulated (PAM) samples”.

g. In claim 6, the phrase “the period or half periods” is suggested to be changed to “periods or half-periods”.

Appropriate correction is required.

3. Claims 5 and 8 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims 5 and 8 have not been further treated on the merits.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The applicant recites claim limitations such as “the digital code are formed by the number, length, time of periods or half periods”, “samples are transmitted on the amplitudes of the periods or half periods”, “analog periods or half-periods”, and “samples coded with periods or half-periods”. The claims do not define a component to which the “periods or half-periods” is referring. It is the understanding of the examiner that if the “periods

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or half-periods” are referring to the “alternating current” then the limitation should be recited as “periods or half-periods of an alternating current”. Simply reciting limitations such as “transmitting/coding with periods or half-periods” renders the claim indefinite for the reasons stated above.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Dirr (U. S. Patent No. 4, 947, 483).

Regarding claim 2, Dirr discloses a process for the encoding of digitized information, characterized in that the digitization takes place through the length, number, time, or phase position of periods or half-periods of an alternating current (column 4, lines 3-22) of the same frequency and phase position, wherein the same size is always assigned to the code words (Fig. 9A-9E) and, at the end, at the beginning, or between the code words, analog periods or half-periods of the same frequency and phase position are provided (column 6, line 39-61, column 8, lines 1-20 and column 9, lines 11-22), wherein the analog periods (speech) are provided between the digital code (data channels) in the same alternating current through the multiplexer .

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8. Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Dirr (U. S. Patent No. 4, 731, 798).

Regarding claim 4, Dirr discloses a process for the transmission of analog information of several channels, characterized in that the PAM samples are coded with the periods or half-periods and , namely, with the amplitudes of an alternating current of the same frequency and phase position, sampled in a time multiplexed manner, and transmitted in series in an uninterrupted sequence (Fig. 1, column 5, line 57-column 6, line 11 and column 8, lines 14-17).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ganter (U. S. Patent No. 6, 038, 262) discloses encoding digital data on an alternating current waveform.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis B. Odom whose telephone number is 571-272-3046. The examiner can normally be reached on Monday- Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Curtis Odom
August 15, 2005



STEPHEN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600